

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.waybi.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|------------------------------------|-------------------------------------|----------------------|---------------------|-----------------|
| 10/601,304 | 06/20/2003 | Jeremy R. Choate | 1513/22 | 7948 |
| 28441 BRINKS HOE | 7590 01/09/200 ER GILSON & LIONE | | EXAM | TINER |
| UTAH OFFICE | | | KING, BRADLEY T | |
| 405 South Main Street Suite 800 | | ART UNIT | PAPER NUMBER | |
| SALT LAKE | CITY, UT 84111-3400 | | 3657 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 01/09/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

| Application No. | Applicant(s) | |
|-----------------|---------------|--|
| 10/601,304 | CHOATE ET AL. | |
| Examiner | Art Unit | |
| Bradley T. King | 3683 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS.

- WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
 - after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
- earned patent term adjustment. See 37 CFR 1.704(b).

| Status | S | |
|--------|---|--|
| 1)🛛 | Responsive to communication(s) filed on 10 June 20 | <u>08</u> . |
| 2a)⊠ | ∑ This action is FINAL. 2b) This action | is non-final. |
| 3) | Since this application is in condition for allowance ex | cept for formal matters, prosecution as to the merits is |
| | closed in accordance with the practice under Ex part | e Quayle, 1935 C.D. 11, 453 O.G. 213. |

Disposition of Claims

Α

| 4)⊠ Claim(s) <u>28-34,37 and 38</u> is/are pending in the application. |
|--|
| 4a) Of the above claim(s) 29.30.32 and 34 is/are withdrawn from consideration. |
| 5) Claim(s) is/are allowed. |
| 6)⊠ Claim(s) <u>28.31,33.37 and 38</u> is/are rejected. |
| 7) Claim(s) is/are objected to. |
| Claim(s) are subject to restriction and/or election requirement. |
| pplication Papers |
| 9)☐ The specification is objected to by the Examiner. |

10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a).

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

a) All b) Some * c) None of:

| 1. | Certified copies of the priority documents have been received. |
|----|--|
| 2. | Certified copies of the priority documents have been received in Application No |
| 3. | Copies of the certified copies of the priority documents have been received in this National Stage |
| | application from the International Bureau (PCT Rule 17.2(a)). |

* See the attached detailed Office action for a list of the certified copies not received.

| Attachment(| S |
|-------------|---|
|-------------|---|

| Attachment(s) | | |
|--|--|--|
| Notice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) | 5) Notice of Informal Patent Application | |
| Paper No(s)/Mail Date 4/08/2008. | 6) Other: . | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 28, 31, 33 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilmore (US# 3027911) in view of "ALTERING WOUND SPRINGS" 1961.

Gilmore provides a relief valve device having an inlet 12, a disk member 38 or 80 closable on the inlet and a mechanism biasing the disk member on the inlet, a body, and an outlet 14, wherein the disk member and the inlet are configured to provide a huddling chamber 88, where a spring 48 is used. Please note that when using or designing the valve in various applications, it is be desirable to have a valve with a different spring rate for varying applications. The article teaches a method of measuring a spring rate and then machining an outer diameter until the spring rate is within specific tolerances (see K ratios, also last paragraph) to ensure proper performance in particular applications. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified provided the spring of Gilmore according to the procedures taught by the article merely to provide a spring which will operate to the designed pressure, within proper pressure tolerances and further to ensure reliability.

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Regarding claim 38, see second orifice 48 on sleeve 56.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/ Primary Examiner, Art Unit 3683

BTK